TI-29922.1 PATENT

## Transistor Circuit With Varying Resistance Lightly Doped Diffused Regions For Electrostatic Discharge ("ESD") Protection

## ABSTRACT OF THE DISCLOSURE

A method of forming a transistor (70) in a semiconductor active area (78). The method forms a gate structure (G<sub>2</sub>) in a fixed relationship to the semiconductor active area thereby defining a first source/drain region (R<sub>1</sub>) adjacent a first gate structure sidewall and a second source/drain region (R<sub>2</sub>) adjacent a second sidewall gate structure. The method also forms a lightly doped diffused region (80<sub>1</sub>) formed in the first source/drain region and extending under the gate structure, wherein the lightly doped diffused region comprises a varying resistance in a direction parallel to the gate structure.